USSN 10/738,413 EXHIBIT 3

siRNA Target Finder

Information

This tool follows the **siRNA design guidelines** first described by Tuschl and colleagues. In general, Ambion scientists find that ~50% of siRNAs designed using this tool will reduce target gene expression by >50%.

(Ambion has recently partnered with Cenix BioScience, a leader in the field of RNAi. Cenix has developed a proprietary siRNA design algorithm that yields a much higher percentage of siRNAs that effectively reduce target mRNA levels. For information on that algorithm, see **Designing a Better siRNA**.)

Paste your mRNA sequence into the window, choose your preferred end structure (3' TT or UU), and the program will scan your sequence for AA dinucleotides. A report is generated indicating the position of the AA dinucleotide, the 21 base target and the corresponding sense and antisense siRNA oligonucleotides.

G/C content is calculated and displayed because Ambion researchers have found that siRNAs with lower G/C content (30-50%) are more active than those with higher G/C content. If desired, you can choose to limit your siRNA choices by maximum G/C content.

Below each candidate target, you will find a link to perform a BLAST search on the sequence. BLAST settings are preset to the recommended default for short sequences and can be modified as you choose (for more information, see the **Blast tutorial**). You may elect to BLAST the entire genome, or perform a more restricted search against sequences from your target species. Choose siRNAs with fewer than 16?17 contiguous base pairs of homology to other genes in your target cells.

Below each target you will also find links that will send the target directly to one of our kit specific design tools. With these tools you can **design template oligonucleotides** for use with our *Silencer*™ siRNA Construction Kit, **design inserts** for our p*Silencer*™ siRNA expression vectors, or **design PCR primers** for use with our *Silencer* Express siRNA Expression Cassette Kits.

If you are ordering custom synthetic siRNAs, the chosen siRNA target sequences can be pasted directly into an online order form such as that found on the Ambion website at **http://web.archive.org/web/20031009153812/http://www.ambion.com/catalog/siRNA_order.html**.

1. Paste your mRNA sequence: 5'-3'

2. End my siRNAs with:

TT UU

3. G/C content maximum (optional):

USSN 10/738,413 EXHIBIT 3

All G/C Contents

Submit